CONSTRUCTION AND USE OF SYNTHETIC CONSTRUCTS ENCODING SYNDECAN

ABSTRACT OF THE DISCLOSURE

A purified mammalian proteoglycan, and genetic information encoding such proteoglycans, having a core polypetide molecular weight of about 30 kD to about 35 kD, and comprising a hydrophilic amino terminal extracellular region, a hydrophilic carboxy terminal cytoplasmic region, a transmembrane hydrophobic region between said cytoplasmic and extracellular regions, a protease susceptible cleavage sequence extracellularly adjacent the transmembrane region of the peptide, and at least one glycosylation site for attachment of a heparan sulfate chain to said extracellular region, said glycosylation site comprising a heparan sulfate attachment sequence represented by a formula Xac-Z-Ser-Gly-Ser-Gly (SEQ ID NO: 44), where Xac represents an amino acid residue having an acidic sidechain, and Z represents from 1 to 10 amino acid residues. Additional peptides having this glycosylation site and genetic information useful for preparing a number of variations based on this glycosylation site are also provided.